

NCGAS 2020 Annual User Survey

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1. NCGAS Annual User Survey – 2020

Start of Block: Default Question Block

Q1 National Center for Genome Analysis Support User Survey

INFORMED CONSENT:

You are invited to participate in a research study conducted by the principal investigator of the National Science Foundation-funded National Center for Genome Analysis Support (NCGAS) project. We ask that you read this statement and ask any questions you may have before agreeing to take part in the survey. This study is administered on behalf of the NCGAS project by the Indiana University Pervasive Technology Institute and is funded, in part, by the National Science Foundation.

STUDY PURPOSE:

The purpose of the NCGAS User Survey is to assess current and future computational needs of the biological research community, as well as additional services we can provide to help your research/analysis. Survey information will be used to guide NCGAS personnel in (1) assessing and addressing current and future needs, (2) focusing outreach and training efforts, (3) making decisions related to resource provisioning, and (4) informing plans for future expansion of resources and services. Further, this study inquires about training methods, research tools, institutional characteristics, users' funding agencies, etc., and informs research publications, grant and supplemental solicitations, agency reporting requirements, best practice theories, and conference presentations.

PROCEDURES FOR THE STUDY:

If you agree to take part in the study, you will complete an online survey in which you will not be **required** to provide any identifying information. You will be asked if members of the research team may contact you for additional follow-up (i.e., to gain further insight about your experiences or concerns, to invite your participation in case studies, etc.) but you may decline to consent. If you consent to further contact, you will be asked to provide your name and contact information. You will also be given the opportunity to associate your comments with your contact information for the purpose of facilitating further contact. The survey will remain confidential, and survey responses will not be associated with any identifying information, unless you specifically grant permission to do so.

You will receive an initial letter of invitation via email, followed by up to three (3) reminder messages. After the initial letter of invitation, only those who have not responded will receive subsequent messages. You will have the opportunity to opt out of all future communications upon receipt of the initial letter of invitation. The survey should not take more than 15 minutes to complete, with an average time for completion in the eight- to ten-minute range.

CONFIDENTIALITY:

Efforts will be made to keep any personal information that you might inadvertently disclose confidential. We cannot guarantee absolute confidentiality. Your personal information may be disclosed if required by law. Your identity will be held in confidence in reports in which the survey results may be published and/or databases in which results may be stored.

Organizations that may inspect and/or copy survey records for quality assurance and data analysis include groups such as the study investigator and research associates, the Indiana University Institutional Review Board or its designees, the study sponsor, the National Science Foundation, and (as allowed by law) state or federal agencies, specifically the Office for Human Research Protections (OHRP).

CONTACTS FOR QUESTIONS OR PROBLEMS:

For questions about the study, contact Indiana University Information Manager Julie Wernert at (812) 856-5517 or jwernert@iu.edu. For questions about your rights as a participant or to discuss problems, complaints, or concerns about a research study, to obtain information, or to offer input, please contact the IU Human Subjects Office at (812) 856-4242 or by email at irb@iu.edu.

VOLUNTARY NATURE OF STUDY:

Taking part in this study is voluntary. You may choose not to take part or may leave the survey at any time. Leaving the survey will not result in any penalty. Your decision whether or not to participate in this survey will not affect your current or future relations with the Indiana University Pervasive Technology Institute, the NCGAS project, or the National Science Foundation.

This study was approved by the Indiana University Institutional Review Board on May 4, 2020. Please reference study #1407478943A006/Exempt when inquiring. Do you agree to participate?

☐ I agree (1)

☐ I disagree (2)

Skip To: Q30 If National Center for Genome Analysis Support User Survey INFORMED CONSENT:You are invited to par... = I agree

Skip To: End of Block If National Center for Genome Analysis Support User Survey INFORMED CONSENT:You are invited to par... = I disagree



Q30 Please tell us which of the following your research involves. *Select all that apply.*

- ☐ Genome assembly (4)
- ☐ RNA-Seq approaches (1)
- ☐ Microbiome/metagenomic assembly and analysis (2)
- ☐ Metatranscriptome assembly and analysis (12)
- ☐ Whole genome structural analysis, i.e., nucleosome mapping, high-resolution DNase sensitivity, transposon insertion sequencing, etc. (3)
- ☐ Protein-DNA interactions with ChIP-seq (5)
- ☐ Methylation studies (6)
- ☐ Proteomics/mass spectrometry (8)
- ☐ Genome annotation/ortholog discovery (9)
- ☐ SNPs/variant analysis (7)
- ☐ Variant discovery/population genomics (11)
- ☐ Other: (10) _____

Page Break



Q31 Which NCGAS services and/or resources have you (or a member of your group) used? *Select all that apply.*

- ☐ Short-term bioinformatics consulting (1)
- ☐ Long-term bioinformatics consulting (2)
- ☐ Help desk and/or technical support for using NCGAS computing resources (3)
- ☐ Assistance with education and/or training (4)
- ☐ Carbonate (5)
- ☐ XSEDE Bridges (14)
- ☐ Galaxy at Indiana University (6)
- ☐ Project or scratch space (7)
- ☐ Scholarly Data Archive (8)
- ☐ NCGAS Trinity Galaxy (9)
- ☐ NCGAS GenePattern Server (10)
- ☐ NCGAS genome browsers (11)
- ☐ XSEDE Jetstream (IU/TACC) (18)
- ☐ Big Red III (17)
- ☐ Karst (15)
- ☐ Research Desktop (RED) (19)

☐

Other local institutional resources (20)

☐

Not sure (12)

☐

Other (21) _____

☐

None of the above (22)

Page Break



Q2 How did you learn about NCGAS? *Select all that apply.*

- ☐ Conference or workshop (1)
- ☐ Academic journal, paper, or website (2)
- ☐ Course lecture or class presentation (3)
- ☐ Press coverage (4)
- ☐ Newsletter, email solicitation, or survey (5)
- ☐ From a colleague (word of mouth) (6)
- ☐ Social media (8)
- ☐ NCGAS website and blog (9)
- ☐ Other: (7) _____

Q3 What percentage of your bioinformatics computation is done using NCGAS resources?

0 10 20 30 40 50 60 70 80 90 100

Percentage of bioinformatics computation using
NCGAS resources ()



Q4 On a scale of 1-5, with "1" being "not important at all" and "5" being "extremely important," how important are NCGAS resources to the execution of your research project(s)?

- ☐ 1 - Not at all important (43)
- ☐ 2 - Slightly important (44)
- ☐ 3 - Moderately important (45)
- ☐ 4 - Very important (46)
- ☐ 5 - Extremely important (47)

Display This Question:

If On a scale of 1-5, with "1" being "not important at all" and "5" being "extremely important," how... != 1 - Not at all important

Q5 Please elaborate on how NCGAS resources are important to your work. *Please do not include any identifying information in your comments.*



Q8 Which of the following resources offer the **greatest** benefit to your research? *Select your top three (3) choices.*

- ☐ Short-term storage of raw data (1)
 - ☐ Long-term storage of finished data sets (2)
 - ☐ Memory during computations (3)
 - ☐ CPU speed/number of available cores (4)
 - ☐ GPU (5)
 - ☐ Labor/personnel (6)
 - ☐ Bandwidth/moving big data (7)
 - ☐ Long-term web hosting (8)
 - ☐ Access to reference data (9)
 - ☐ Assistance with education and/or training (12)
 - ☐ Consultation time (13)
 - ☐ Install/curated bioinformatic applications (11)
 - ☐ Mounting of applications as web-accessible galaxy tools (14)
 - ☐ Cloud computing (15)
 - ☐ Other: (10) _____
-

Q13 On a 1-5 scale, with "1" being "very dissatisfied" and "5" being "very satisfied", please rate your satisfaction with the following NCGAS services. *If you have no basis for evaluation, please select not applicable.*

	Very dissatisfied (58)	Somewhat dissatisfied (59)	Neither satisfied nor dissatisfied (61)	Somewhat satisfied (62)	Very satisfied (63)	Not applicable (64)
Genome analysis/bioinformatics consulting (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Use of software workflow systems deployed by NCGAS (e.g., Galaxy, GenePattern, JBrowse, etc.) (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Use of the Carbonate clusters (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Educational materials (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Talks and guest lectures (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Response time (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Overall satisfaction with NCGAS (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Blogposts (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
NCGAS RNAseq pipeline (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q37 We are developing the following workshops; which would you be interested in attending? *Select all that apply.*

- ☐ Genome assembly and annotation (3)
- ☐ Python for Biologists (4)
- ☐ Data management and collaboration in HPC (5)
- ☐ Epigenetics (methylomics and other methods) (6)
- ☐ RAD-seq analysis (1)
- ☐ Machine Learning for Biologists (2)
- ☐ Other: (7) _____

Page Break

Q14 What do you like about NCGAS resources? *Please do not include any identifying information in your comments.*

Q15 How can we improve our support of your research needs? *Please do not include any identifying information in your comments. If you have specific comments or requests, please contact help@ncgas.org.*

End of Block: Block 1

Start of Block: Products Block



Q56 Please tell us about any products you have produced that have benefited in some way from use of NCGAS resources. *Select all that apply.*

- ☐ ☒ Not applicable (1)
- ☐ Journal articles (2)
- ☐ Books (3)
- ☐ Book Chapters (4)
- ☐ Thesis/Dissertations (5)
- ☐ Conference Papers and Presentations (6)
- ☐ Other Publications (7)
- ☐ Technologies or Techniques (8)
- ☐ Patents (9)
- ☐ Inventions (10)
- ☐ Licenses (11)
- ☐ Datasets (14)
- ☐ Websites (12)
- ☐ Software (15)
- ☐ Other: (13) _____

Skip To: End of Block If Please tell us about any products you have produced that have benefited in some way from use of N... = Not applicable

Q59 Please provide citations for the products (including theses, dissertations, and conference presentations) that you indicated have benefited from the use of NCGAS, including title, authors, publication, publication date, when and where presented, URL, and/or digital object identifier (DOI).

End of Block: Products Block

Start of Block: Demographic block

Q60 To help us contextualize your responses, please answer the following demographic questions. To ensure your survey responses remains confidential, please do not include any identifying information in your comments. If you have questions or concerns and would like to be contacted by NCGAS staff, please email us at **help@ncgas.org**.

Q18 Have you used NCGAS services as an undergraduate and/or as a student at a two-year college?

☐ Yes (1)

☐ No (2)

Q19 Have you used NCGAS services as a graduate and/or PhD student?

☐ Yes (1)

☐ No (2)

Q22 Are you a member of the Indiana University community?

☐ Yes (1)

☐ No (2)

Q47 What is your *primary* research field or field of study?

▼ Arts and Humanities (1) ... Not applicable (22)

Q26 From which of the following agencies do you have funding? *Select all that apply.*

☐

National Science Foundation (1)

☐

National Institutes of Health (2)

☐

Department of Energy (3)

☐

US Department of Agriculture (4)

☐

Department of Defense (5)

☐

Environmental Protection Agency (6)

☐

National Oceanic and Atmospheric Administration (8)

☐

Department of the Interior (10)

☐

Other: (7) _____

Q28 What is your status as a user of NCGAS services and resources?

- ☐ I am the owner of an NCGAS allocation. (1)
 - ☐ I am on someone else's allocation. (2)
 - ☐ I am not associated with an NCGAS allocation. (3)
-

Q43 Which of the following describe your institution? *Select all that apply.*

- ☐ Institution located in an EPSCoR state (1)
 - ☐ Minority-serving institution (MSI) (2)
 - ☐ Associate's college (all degrees are at the associate level) (3)
 - ☐ Baccalaureate college/university (4)
 - ☐ Master's college/university (5)
 - ☐ Doctorate-granting University (6)
 - ☐ Teaching-focused institution (7)
 - ☐ Research-focused institution (8)
 - ☐ Government lab or center (9)
 - ☐ High performance computing resource provider (e.g., NCSA, TACC, etc.) (10)
 - ☐ Non-profit organization (non-academic) (11)
 - ☐ Corporate/industrial organization (12)
 - ☐ I don't know (13)
-

Display This Question:

If Which of the following describe your institution? Select all that apply. = Institution located in an EPSCoR state

Or Which of the following describe your institution? Select all that apply. = Minority-serving institution (MSI)

Or Which of the following describe your institution? Select all that apply. = Associate's college (all degrees are at the associate level)

Or Which of the following describe your institution? Select all that apply. = Baccalaureate college/university

Or Which of the following describe your institution? Select all that apply. = Master's college/university

Or Which of the following describe your institution? Select all that apply. = Doctorate-granting University

Or Which of the following describe your institution? Select all that apply. = Teaching-focused institution

Or Which of the following describe your institution? Select all that apply. = Research-focused institution

Q42 What is the size of your academic institution?

- ☐ Small (fewer than 3,000 degree-seeking students) (1)
- ☐ Medium (3,000 - 10,000 degree-seeking students) (2)
- ☐ Large (more than 10,000 degree-seeking students) (3)
- ☐ Not applicable (4)

Q53 What is your primary institutional affiliation?

Q49 Considering your primary institutional affiliation, indicate the country in which that institution is located.

▼ United States (1) ... Other (253)

Display This Question:

If Considering your primary institutional affiliation, indicate the country in which that institutio... = United States

Q54 In which state is your institution located?

▼ Alabama (1) ... Wyoming (50)

Q46 Select your primary role.

- ☐ Executive leadership (e.g., director, CIO, etc.) (1)
 - ☐ University faculty or equivalent (2)
 - ☐ University/center research staff or equivalent (non-postdoctoral) (3)
 - ☐ University/center non-research support staff (or equivalent) (4)
 - ☐ Postdoctoral fellow (5)
 - ☐ Graduate student (6)
 - ☐ Undergraduate student (7)
 - ☐ Other (please specify): (8) _____
-

Q45 What is your race? *Select all that apply.*

☐

Alaskan Native (1)

☐

American Indian (2)

☐

Asian or Asian-American (3)

☐

Black or African-American (4)

☐

Native Hawaiian or other Pacific Islander (5)

☐

White (6)

☐

Other: (7) _____

☐

Prefer not to disclose (8)

Q44 What is your gender?

☐

Female (1)

☐

Male (2)

☐

Nonbinary (3)

☐

Other: (4) _____

☐

Prefer not to disclose (5)

End of Block: Demographic block

Start of Block: Contact info block

Q35 May we contact you regarding your responses?

☐ Yes (5)

☐ No (6)

Display This Question:

If May we contact you regarding your responses? = Yes

Q48 You have granted consent for additional contact. Please provide your name and preferred contact information.

☐ Name (7) _____

☐ Email (8) _____

☐ Phone Number (9) _____

End of Block: Contact info block
